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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,174	12/11/2003	Masaaki Oka	SCES 20.808 (100809-00230)	5945
26304                      7590                      11/10/2010 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585				
EXAMINER				
ARCOS, CAROLINE H				
ART UNIT		PAPER NUMBER		
2195				
MAIL DATE		DELIVERY MODE		
11/10/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/733,174

## Applicant(s)

OKA ET AL.

## Examiner

CAROLINE ARCOS

## Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

3. This communication is responsive to amendment filed on 07/12/2010.
4. Claims 1-13 are pending for examination. Claims 1 and 7 are independent claims. In the amendment claims 12-13 are added.

***Continued Examination Under 37 CFR 1.11***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/12/2010 has been entered.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims are 1-6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. claim language in the following claims is not clearly understood:
    - i. As per claim 1, line 3, the term "capable of operating" is vague and indefinite since it is not clearly understood whether component processor is operating or only capable to operate. Capability of performing a task does not

mean performing it. Therefore, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-5 and 7-13 are rejected under 35 U.S.C. 102(a) as being anticipated by Suzuoki et al. (Us 2002/0138707 A1).

As per claim 1, Suzuoki teaches the invention as claimed including a signal processing device, comprising:

a general-purpose signal processor formed of a plurality of component-processors, each of the component-processors is capable of operating under a plurality of configurations of connections of the plurality of component-processors associated with a plurality of software tasks, and operating independently from other component-processors(par. [0012]- Par. [0014]; par. [0131]-par. [0139]; wherein PE is general purpose signal processor and APUs are the component-processors); and

a management processor for selecting a number of component-processors to operate and for configuring the connections of the plurality of operating component-processors for loading

application programs into the component-processors in response to a type of processing and an estimated load of an entire processing (par. [0012]- Par. [0014]; par. [0017]- Par. [0019]; par. [0021]; par. [0065]; par. [0123]; par. [0126] wherein PU is the management processor that orchestrates the processing of data and applications by the APUs).

As per claim 2, Suzuoki teaches an input/output interface for receiving a signal to be processed inputted from an external device or one of the component-processors, and for outputting a processed signal to the external device or one of the component-processors, wherein the management processor controls the input/output interface so as to swap one of the component-processors which receives the signal to be processed which is inputted through the input/output interface or outputs the processed signal in accordance with a demand for signal processing (Par. [0067]; Par. [0072]; Par. [0074]; Par. [0110]; Par. [0131]-Par. [0139]; wherein the PU orchestrates and control the processing of data and application by APU and Controlling which APU does what task by grouping the APUs based on the type of signals ).

As per claim 3, Suzuoki teaches the input/output interface includes a cross bus switch that can selectively connect, under the control of the management processor, the external device to one of the component-processors, or the component-processors to each other (fig. 3, 317, 311; Par. [0018]; Par. [0065]; Par. [0067]; Par. [0072]).

As per claim 4, Suzuoki teaches the input/output interface includes a multiple bus that can selectively connect, under the control of the management processor, the external device to

one of the component-processors, or the component-processors to each other (fig. 3, 317, 311; par. [0018]; par. [0065]; par. [0067]; par. [0072]).

As per claim 5, Suzuoki teaches wherein a local memory is disposed on each of the component-processors, said local memory stores a signal to be processed or a signal processed result by the component-processors until the signal to be processed or the signal processed result becomes available to be outputted to the input/output interface (par.[0064]; Par.[0083]; par. [0089]; Par. [0093]-Par. [0094]; Par. [0097]; Par. [0099]-Par. [0106]; Par. [0110]; Par. [0138]).

As per claim 7, Suzuoki teaches an entertainment device, comprising:

a signal processing device including a general-purpose signal processor, a management processor, and an input/output interface (Fig. 3, elements 371,303); and

a main processor that provides a demand for signal processing to the signal processing device (par. [0066]; wherein the BE is the main processor; fig. 3, element 301), wherein the general-purpose signal processor is formed of a plurality of component-processors, each of the component-processors operates in parallel under a plurality of operating configurations of connections of the plurality of component-processors associated with software tasks and independently from other component-processors(par. [0012]- Par. [0014]; par. [0131]-par. [0139]; wherein PE is general purpose signal processor and APUs are the component-processors); and

the input/output interface inputs a signal to be processed from an external device or one of the component-processors, and outputs a processed signal to the external device or one of the

component-processors (par. [0067]; par. [0072]; par. [0074]; par. [0087]; par. [0110]),

the management processor selects a number of component-processors to operate and configures the connections of the plurality of component-processors for loading application programs into the component-processors in response to a demand for signal processing provided from the main processor (par. [0012]- Par. [0014]; par. [0017]- Par. [0019]; par. [0021]; par. [0065]; par. [0123]; par. [0126] wherein PU is the management processor that orchestrates the processing of data and applications by the APUs);

the demand for signal processing is estimated based on a type of processing and an estimated load of an entire processing (par. [0012]; par. [0014]; par. [0019]; par. [0065]) , and

controls the input/output interface so as to swap one of the component-processors which receives the signal to be processed which is inputted through the input/output interface or outputs the processed signal in accordance with the demand for signal processing(par. [0067]; par. [0072]; par. [0074]; par. [0110]; par. [0131]-par. [0139]; wherein the PU orchestrates and control the processing of data and application by APU and Controlling which APU does what task by grouping the APUs based on the type of signals ).

As per claim 8, Suzuoki teaches a network interface that enables a connection with a computer network, and a storage means that stores digital information readable by a computer, wherein the main processor controls the network interface to acquire the digital information from an external device, stores the acquired digital information in the storage means, and provides the stored digital information and a demand for signal processing based on the digital information to the management processor of the signal processing device to constitute operating environments

for entertainment processing the contents of which are determined in accordance with the digital information (par. [00012]-par. [0013]; par. [0056]-par. [0057]; par. [0083]; par. [0085]; par. [0110]; par. [0120]; par. [0126]; par. [0131]-par. [0139]; wherein the network interface is implicit because the computers and the computer devices are connected to network and communicate with each other for processing data and application, hence, there must be a network interface for these computers to communicate with each other ).

As per claim 9, Suzuoki teaches the main processor constructs the operating environments for entertainment processing on one or more of the component-processors through the management processor, and, after constructing the operating environments, said main processor reconstructs said operating environments to new operating environments upon receipt of another digital information which differs from said digital information (par. [0013]-par. [0014]; par. [0018]; par. [0066]; par. [0082]-par. [0083]; par. [0131]-par. [0139]).

As per claim 10, Suzuoki teaches the digital information comprises plural kinds of application programs that can execute required functions, respectively, and wherein the management processor assigns any of the functions to the corresponding component-processors, and reads a corresponding application program for executing the assigned function from the storage means, and executes the application program(par. [0013]-par. [0014]; par. [0018]; par. [0066]; par. [0082]-par. [0083]; par. [0131]-par. [0139]).



As per claim 11, Suzuoki teaches each of the component-processors operates only for executing the application program for executing the function assigned to the component-processor until the management processor provides another demand to the component-processor (par.[0018]-par.[0019]; par.[0131]-par.[0137]).

As per claim 12, Suzuoki teaches wherein each of the plurality of component-processors are formed of the same hardware structure (par. [0011]-par. [0012]; par. [0057]).

As per claim 13, Suzuoki teaches wherein each of the plurality of component-processors are formed of the same hardware structure (par. [0011]-Par. [0012]; par. [0057]).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuoki et al. (Us 2002/0138707 A1).

As per claim 6, Suzuoki teaches the general-purpose signal processor, the management processor and the input/output interface are disposed on one system (fig.3, element 319, 317, 303), the system including a first connection interface being connectable to a device that

provides a demand for signal processing to the management processor, and a second connection interface being connectable to the external device that delivers a signal with respect to the input/output interface (par. [0110]-par. [0111]).

Suzuoki does not explicitly teach that the system is a single case. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that is well known that disposing the system on a single case is a design choice that enables the portability of the system.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAROLINE ARCOS whose telephone number is (571)270-3151. The examiner can normally be reached on Monday-Thursday 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caroline Arcos/  
Examiner, Art Unit 2195

/Chat C. Do/  
Primary Examiner, Art Unit 2193